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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,727

06/05/2006

Tamami Koyama

Q78966

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23373 7590 03/27/2009
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

NGUYEN, HAIDUNG D

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

03/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,727	Applicant(s) KOYAMA ET AL.	
	Examiner Haidung D. Nguyen	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This application is a 371 of PCT/JP04/18668 filed 12/08/04. The preliminary amendment filed 6/05/06 is entered. Claims 1-11 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormick et al. (6,611,096) in view of Saida et al. (JP11-189746). The machine translation of JP11-189746 was used for the rejection purposes.**

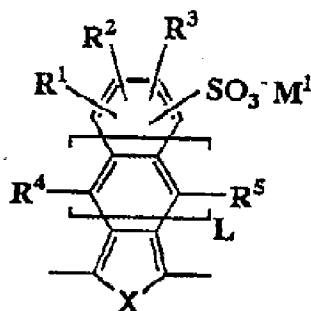
5. McCormick et al. discloses a coating solution for an anode buffer layer and an anode buffer layer in an organic light emitting device comprising a self-doping conductive polymer including polythiophenes, polyanilines and polyisothianaphthenes.

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6. McCormick et al. further discloses an organic light emitting device comprising at least one light emitting layer between an anode and a cathode, wherein the light emitting layer adjacent to the anode is an anode buffer layer (figures 1 and 2)

7. McCormick et al. does not disclose the self-doping conductive polymer as claimed.

8. Saida et al. discloses a coating solution comprising a self-doping conductive polymer, wherein the polymer comprise a monomer unit represented by the formula (1)



Formula (1)

3. The molecular weight of the self-doping conductive polymer is not limited and can be in the range of 5 to 2000. Examples of the self-doping conductive polymer are a polymer of 5-sulfoisothianaphthene-1, 3-diyl, a random copolymer containing 5-sulfoisothianaphthene-1, 3-diyl in an amount of 80 % by mass or more, poly (5-sulfoisothianaphthene-1,3-diyl-co-isothianaphthene-1,3-diyl) or a salt thereof (para 0008, 0018-0020).

4. Saida et al. is silent on the pH value of the polymer in a 1% by mass solution. However, the composition of prior art is identical or substantially identical that set forth by applicant. Therefore, the composition of prior art would possess the same properties

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as claimed. "Product of identical chemical composition can not have mutually exclusive properties". A chemical composition and its properties are inseparable.

5. Saida et al. discloses a coating solution comprising the polymer at a concentration of 0.1 to 10% by mass and further comprising a surfactant at a concentration of 100% by mass or less based on the polymer and at least one alcohol selected from the group consisting of methanol, ethanol and 2-propanol at a concentration of 60% by mass or less based on the whole solution (para 0024, 0025 and 0026).

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the coating solution comprising the polymer as taught by Saida et al. with the invention of McCormick et al., thereby providing an anode buffer layer that is excellent in stability and conductivity.

10. **Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormick et al. (6,611,096) in view of Saida et al. (JP11-189746) as applied to claims 1-9 above, and further in view of Takeuchi et al. (US 2004/0247934)**

11. McCormick et al. in view of Saida et al. disclose an organic light emitting device as discussed above. Neither McCormick et al. or Saida et al. discloses the light emitting layer comprises a fluorescent or phosphorescent polymer material.

12. Takeuchi et al. discloses an organic light emitting device comprising a light emitting layer, wherein the light emitting layer comprises a fluorescent or phosphorescent polymer material (para 0348).

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13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the fluorescent or phosphorescent polymer material as taught by Takeuchi et al., thereby provide an organic light emitting device having high luminance and high light emission efficiency.

Examiner Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haidung D. Nguyen whose telephone number is (571)270-5455. The examiner can normally be reached on M-Th: 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Kopec/
Primary Examiner, Art Unit 1796

\HN\
Examiner
3/24/09